

10/665,227R>

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NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	4	OCT 28	KOREAPAT now available on STN
NEWS	5	NOV 30	PHAR reloaded with additional data
NEWS	6	DEC 01	LISA now available on STN
NEWS	7	DEC 09	12 databases to be removed from STN on December 31, 2004
NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	18	FEB 10	STN Patent Forums to be held in March 2005
NEWS	19	FEB 16	STN User Update to be held in conjunction with the 229th ACS National Meeting on March 13, 2005
NEWS	20	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	21	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	22	FEB 28	MEDLINE/LMEDLINE reloaded
NEWS	23	MAR 02	GBFULL: New full-text patent database on STN
NEWS EXPRESS			JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:15:10 ON 02 MAR 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:15:27 ON 02 MAR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 MAR 2005 HIGHEST RN 840454-17-3

DICTIONARY FILE UPDATES: 1 MAR 2005 HIGHEST RN 840454-17-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

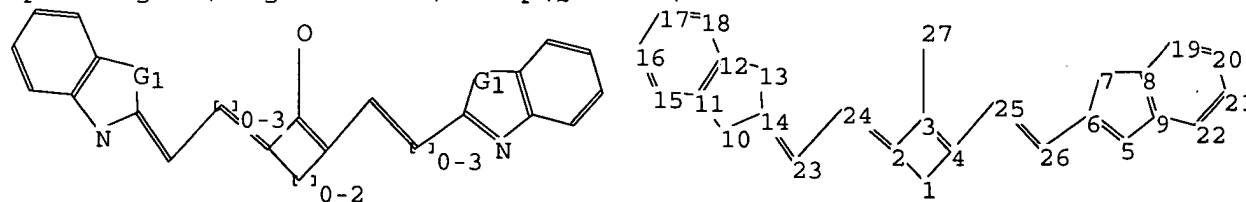
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\106652273.str



chain nodes :

23 24 25 26 27

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

chain bonds :

2-24 3-27 4-25 6-26 14-23 23-24 25-26

ring bonds :

1-2 1-4 2-3 3-4 5-6 5-9 6-7 7-8 8-9 8-19 9-22 10-11 10-14 11-12 11-15  
12-13 12-18 13-14 15-16 16-17 17-18 19-20 20-21 21-22

10/665,227R>

exact/norm bonds :

1-2 1-4 2-3 2-24 3-4 3-27 4-25 5-6 5-9 6-7 6-26 7-8 10-11 10-14 12-13  
13-14 14-23 23-24 25-26

normalized bonds :

8-9 8-19 9-22 11-12 11-15 12-18 15-16 16-17 17-18 19-20 20-21 21-22

G1:C,O,S,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom  
20:Atom 21:Atom 22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS

L1 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 15:15:51 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 4405 TO ITERATE

22.7% PROCESSED 1000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 84120 TO 92080

PROJECTED ANSWERS: 1 TO 213

L2 1 SEA SSS SAM L1

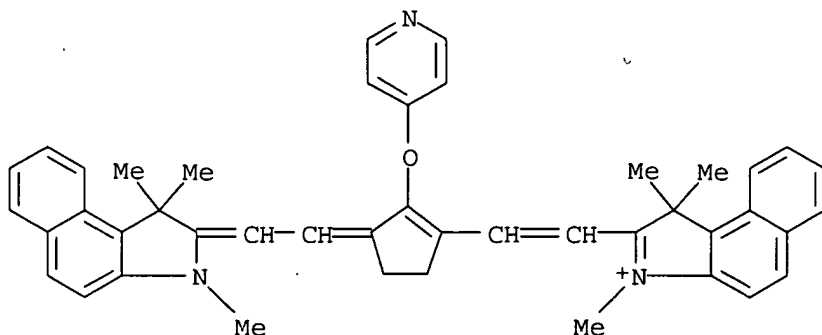
=> d scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 1H-Benz[e]indolium, 2-[2-[3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-(4-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI)

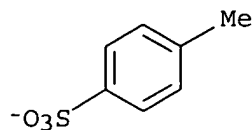
MF C44 H42 N3 O . C7 H7 O3 S

CM 1



CM 2

10/665,227R>



ALL ANSWERS HAVE BEEN SCANNED

=> s l1 ful  
FULL SEARCH INITIATED 15:16:07 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 88488 TO ITERATE

100.0% PROCESSED 88488 ITERATIONS 73 ANSWERS  
SEARCH TIME: 00.00.02

L3 73 SEA SSS FUL L1

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	161.33	161.54

FILE 'CAPLUS' ENTERED AT 15:16:18 ON 02 MAR 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 2 Mar 2005 VOL 142 ISS 10  
FILE LAST UPDATED: 1 Mar 2005 (20050301/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3  
L4 15 L3

=> d l4 ibib hitstr abs 1-15

L4 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2003:907505 CAPLUS  
DOCUMENT NUMBER: 139:388488  
TITLE: Image-forming material such as dry resist film having positive-working photoresist layer  
INVENTOR(S): Urano, Toshiyoshi; Uematsu, Takuya; Mizuho, Yuji  
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

10/665,227R>

DOCUMENT TYPE: CODEN: JKXXAF  
LANGUAGE: Patent  
FAMILY ACC. NUM. COUNT: Japanese  
PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003330173	A2	20031119	JP 2002-135385	20020510
PRIORITY APPLN. INFO.:			JP 2002-135385	20020510
OTHER SOURCE(S):	MARPAT 139:388488			

IT 625077-46-5

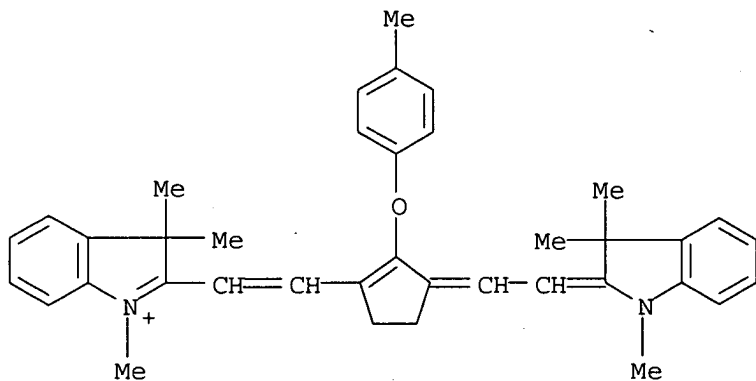
RL: TEM (Technical or engineered material use); USES (Uses)  
(indole dye for light-to-heat converting material in image-forming material)

RN 625077-46-5 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-methylphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)

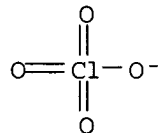
CM 1

CRN 625077-45-4  
CMF C38 H41 N2 O



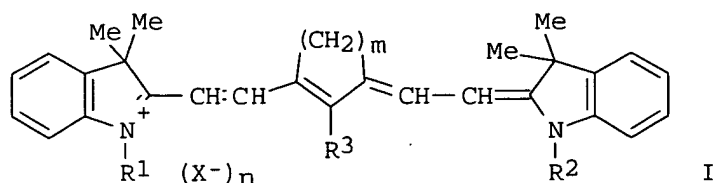
CM 2

CRN 14797-73-0  
CMF Cl O4



GI

10/665,227R>



AB The title material has a photoresist layer containing a light-to-heat converting material and an alkali-solubilizable resin, wherein the light-to-heat converting material is made of indole dye of I (R1-2 = alkyl; R3 = barbiturate, thiobarbiturate, halo, etc.; m = 2,3; X- = anion; n = 0, 1). The image forming material shows wide development conditions.

L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:868604 CAPLUS

DOCUMENT NUMBER: 139:371871

TITLE: Preparation of positive-working photoimaging composition for offset printing plate

INVENTOR(S): Urano, Toshiyoshi; Uematsu, Takuya; Mizuho, Yuji

PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003315991	A2	20031106	JP 2002-121173	20020423
PRIORITY APPLN. INFO.:			JP 2002-121173	20020423
OTHER SOURCE(S):	MARPAT 139:371871			

IT 622398-05-4

RL: TEM (Technical or engineered material use); USES (Uses)  
(photothermal conversion substance in pos.-working photoimaging composition for offset printing plate)

RN 622398-05-4 CAPLUS

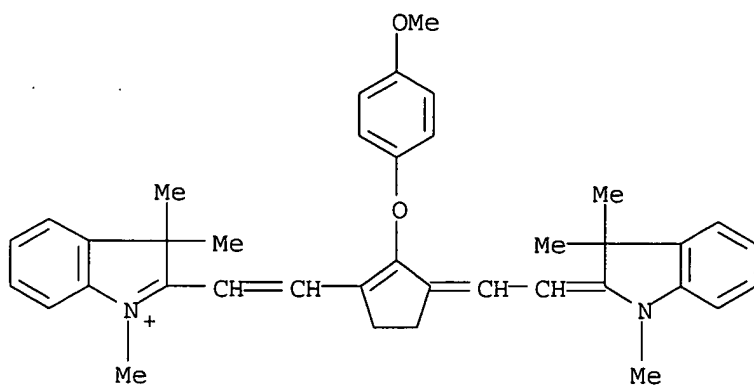
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 173536-20-4

CMF C38 H41 N2 O2

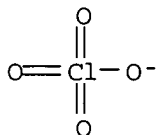
10/665,227R>



CM 2

CRN 14797-73-0

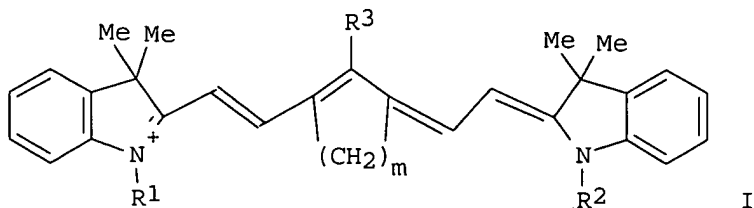
CMF Cl O4



GI

C<sub>45</sub>H<sub>48</sub>Cl<sub>2</sub>N<sub>3</sub>

Stereo: ns



AB The invention relates to a pos.-working photoimaging composition, comprising a photothermal conversion substance and an alkaline-soluble resin, for direct digital printing platemaking, wherein the photothermal conversion substance is an indole dye represented by I (R<sub>1</sub>, R<sub>2</sub> = alkyl; R<sub>3</sub> = barbituric anion; thiobarbituric anion; aromatic ring oxy, aromatic ring thio, heterocyclic oxy, heterocyclic thio, halo; m = 2, 3; X- = anion; n = 0, 1).

L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:678364 CAPLUS

DOCUMENT NUMBER: 139:205006

TITLE: Thermally developable imaging materials with improved image uniformity

INVENTOR(S): Hunt, Bryan V.; Kong, Steven H.; Ramsden, William D.; Labelle, Gary E.

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

10/665,227R>

SOURCE: U.S. Pat. Appl. Publ., 43 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003162134	A1	20030828	US 2001-11892	20011205
US 6689547	B2	20040210		

PRIORITY APPLN. INFO.: US 2001-11892 20011205

OTHER SOURCE(S): MARPAT 139:205006

IT 583839-62-7

RL: TEM (Technical or engineered material use); USES (Uses)  
(radiation absorbing compound; thermally developable imaging materials  
with improved image uniformity containing)

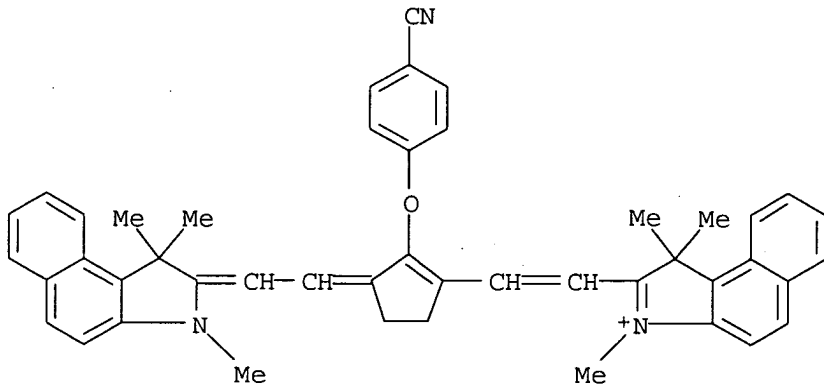
RN 583839-62-7 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-(4-cyanophenoxy)-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 583839-61-6

CMF C46 H42 N3 O





AB A photothermog. material comprises a support having thereon one or more thermally-developable imaging layers comprising a binder and in reactive association, a photosensitive silver halide, a non-photosensitive source of reducible silver ions, and a reducing composition for the non-photosensitive source reducible silver ions. The thermally-developable layers further comprises one or more radiation absorbing compds. that provide a total absorbance of > 0.6 and up to and including 3 in the thermally-developable imaging layer(s). These photothermog. materials exhibit reduced mottle without significant loss in sensitivity.

L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:209951 CAPLUS

DOCUMENT NUMBER: 132:233734

TITLE: Near infrared fluorescent contrast agent and fluorescence imaging

INVENTOR(S): Miwa, Naoto; Inagaki, Michihito; Eguchi, Hiroaki; Okumura, Masafumi; Inagaki, Yoshio; Harada, Toru

PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany; Fuji Photo Film Co., Ltd.

SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000016810	A1	20000330	WO 1999-EP7088	19990916
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
JP 2000095758	A2	20000404	JP 1998-283301	19980918
CA 2344315	AA	20000330	CA 1999-2344315	19990916
CA 2413033	AA	20000330	CA 1999-2413033	19990916
AU 9959814	A1	20000410	AU 1999-59814	19990916
AU 763991	B2	20030807		
BR 9913849	A	20010612	BR 1999-13849	19990916
EP 1113822	A1	20010711	EP 1999-969341	19990916
EP 1113822	B1	20030903		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200100746	T2	20010723	TR 2001-200100746	19990916
EE 200100162	A	20020815	EE 2001-162	19990916
JP 2002526458	T2	20020820	JP 2000-573771	19990916
TR 200202652	T2	20030321	TR 2002-200202652	19990916
JP 2003160558	A2	20030603	JP 2002-331674	19990916
JP 3507060	B2	20040315		
NZ 510019	A	20030725	NZ 1999-510019	19990916
AT 248608	E	20030915	AT 1999-969341	19990916
PT 1113822	T	20040130	PT 1999-969341	19990916
ES 2207338	T3	20040516	ES 1999-969341	19990916
BG 105337	A	20011031	BG 2001-105337	20010313
BG 107411	A	20040630	BG 2002-107411	20010313
NO 2001001338	A	20010516	NO 2001-1338	20010316

10/665,227R>

NO 2002005819	A	20010516	NO 2002-5819	20021204
US 2003180221	A1	20030925	US 2002-324010	20021220
NZ 525453	A	20030926	NZ 2003-525453	20030423
PRIORITY APPLN. INFO.:			JP 1998-283301	A 19980918
			JP 2000-573771	A3 19990916
			NZ 1999-510019	A 19990916
			WO 1999-EP7088	W 19990916
			CA 1999-2344315	A3 19990918
			US 2001-787394	A3 20010516

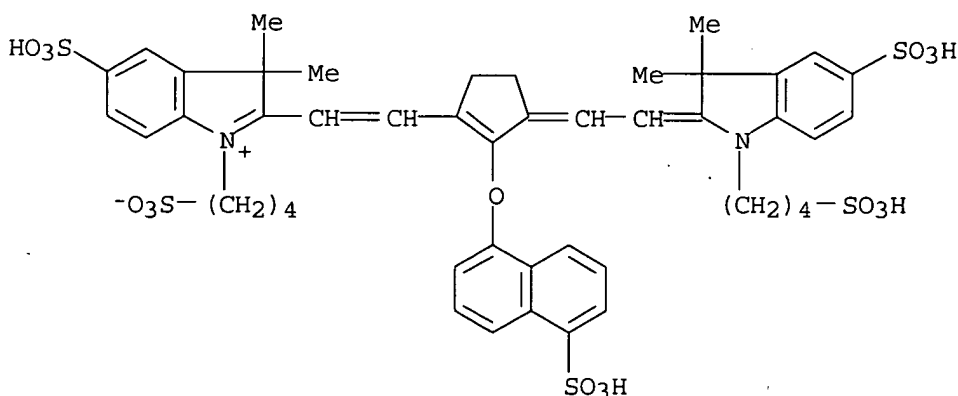
OTHER SOURCE(S): MARPAT 132:233734

IT 262284-02-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(near IR fluorescent contrast agent and fluorescence imaging)

RN 262284-02-6 CAPLUS

CN 3H-Indolium, 2-[2-[3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]ethylidene]-2-[(5-sulfo-1-naphthalenyl)oxy]-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-, inner salt, tetrasodium salt (9CI) (CA INDEX NAME)



● 4 Na

AB A near IR fluorescent contrast agent comprising a compound having three or more sulfonic acid groups in a mol., and a method of fluorescence imaging comprising introducing the near IR fluorescent contrast agent of the present invention into a living body, exposing the body to an excitation light, and detecting near IR fluorescence from the contrast agent. The near IR fluorescent contrast agent of the present invention is excited by an excitation light and emits near IR fluorescence. This IR fluorescence is superior in transmission through biol. tissues. Thus, detection of lesions in the deep part of a living body has been made possible. In addition, the inventive contrast agent is superior in water solubility and low toxic, and therefore, it can be used safely.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:385944 CAPLUS

DOCUMENT NUMBER: 125:44968

TITLE: Silver halide photographic material with superior IR sensor detectability and sensitivity

INVENTOR(S): Harada, Tooru; Suzuki, Keiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.

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DOCUMENT TYPE: CODEN: JKXXAF  
LANGUAGE: Patent  
FAMILY ACC. NUM. COUNT: Japanese  
PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08095197	A2	19960412	JP 1994-227982	19940922
PRIORITY APPLN. INFO.:			JP 1994-227982	19940922

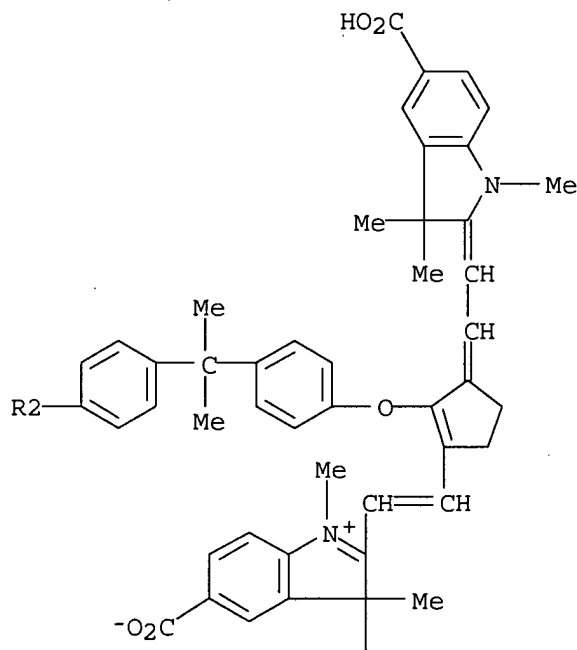
IT 178106-29-1 178106-30-4

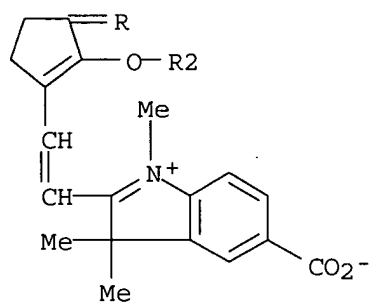
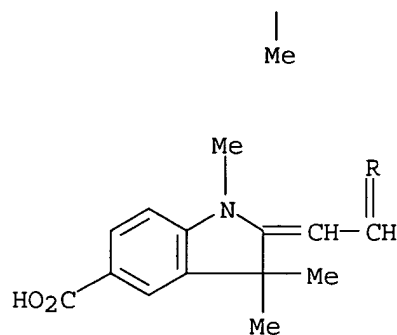
RL: DEV (Device component use); USES (Uses)  
(dye for photog. material)

RN 178106-29-1 CAPLUS

CN 3H-Indolium, 2,2'-[(1-methylethylidene)bis[4,1-phenyleneoxy[3-[(5-carboxy-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopentene-2,1-diyl]-2,1-ethenediyl]]bis[5-carboxy-1,3,3-trimethyl-, bis(inner salt) (9CI) (CA INDEX NAME)

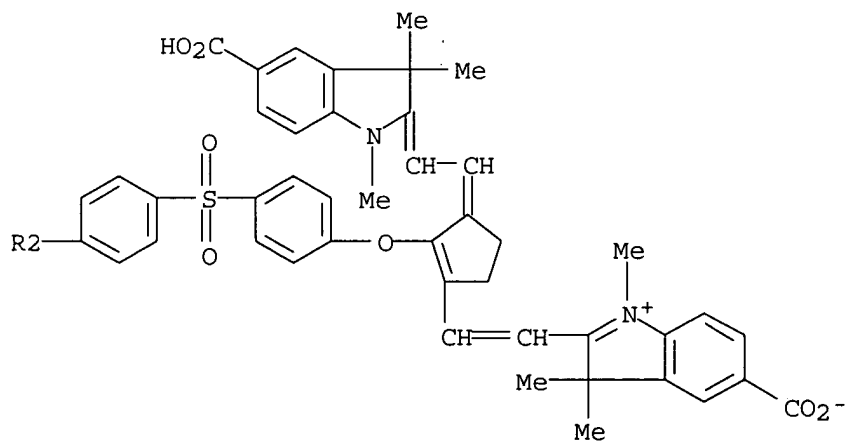
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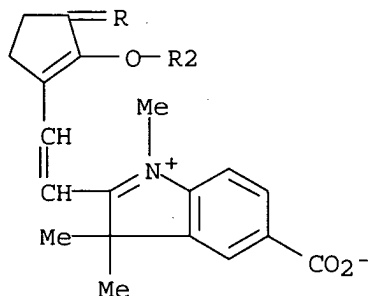
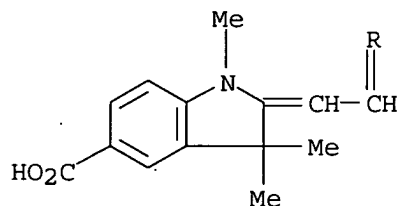




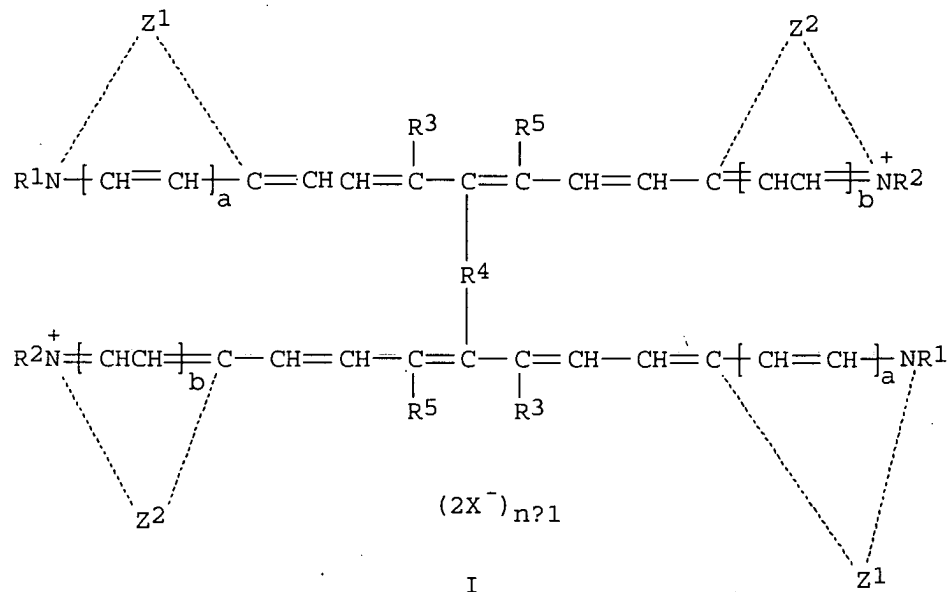
RN 178106-30-4 CAPLUS

CN 3H-Indolium, 2,2'-[sulfonylbis[4,1-phenyleneoxy[3-[(5-carboxy-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopentene-2,1-diyl]-2,1-ethenediyl]]bis[5-carboxy-1,3,3-trimethyl-, bis(inner salt) (9CI) (CA INDEX NAME)





GI



AB The title photog. material contains a dye I (Z1, Z2 = atoms required to form a 5-6-membered ring; R1, R2 = alkyl, alkenyl, aralkyl; R3 and R5 may be H, or connected to form a 5-6-membered ring; R4 = divalent group; a, b = 0, 1; X = anion; n = 1, 2). 2 Modifications of the dye are also claimed.

10/665,227R>

TITLE: Photographic element with ether dye for near-infrared antihalation  
INVENTOR(S): Fabricius, Dietrich M.; Schelhorn, Thomas  
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA  
SOURCE: U.S., 14 pp., Cont.-in-part of U.S. Ser. No. 195,068, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5519145	A	19960521	US 1994-225388	19940408
JP 07287346	A2	19951031	JP 1995-82178	19950407
US 5536626	A	19960716	US 1995-445455	19950531
PRIORITY APPLN. INFO.:			US 1994-195068	B2 19940214
			US 1994-225388	A 19940408

OTHER SOURCE(S): MARPAT 125:99952

IT 173536-21-5P 173536-22-6P 173536-23-7P  
173536-25-9P 173536-27-1P 173536-29-3P  
173536-30-6P 173536-31-7P 173536-32-8P  
173536-34-0P 173536-35-1P 173536-37-3P  
173536-53-3P 173536-55-5P 173536-57-7P  
179028-69-4P 179028-72-9P 179028-74-1P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation and use as near-IR antihalation dye for silver halide photog. films)

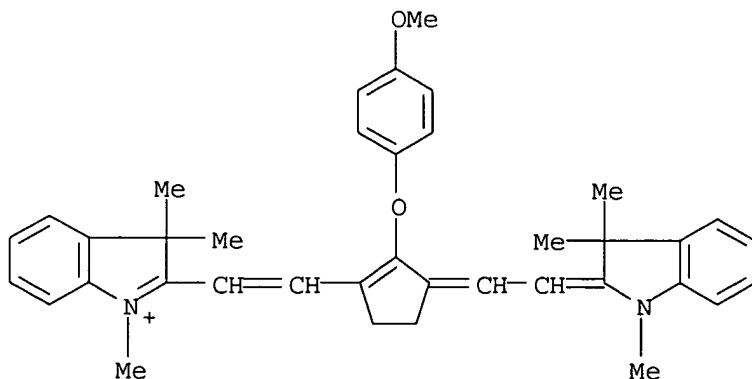
RN 173536-21-5 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-20-4

CMF C38 H41 N2 O2

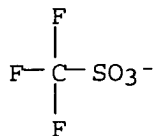


CM 2

CRN 37181-39-8

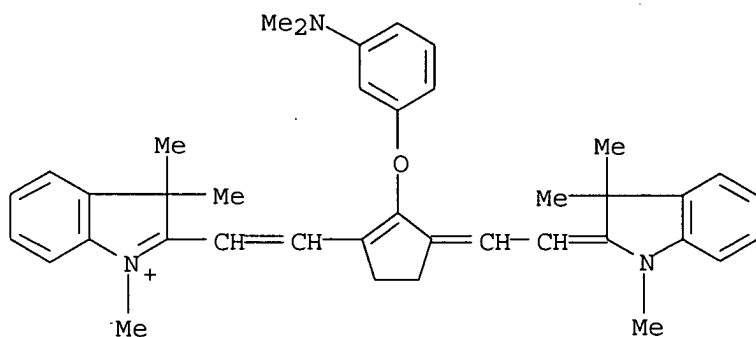
CMF C F3 O3 S

10/665,227R>



RN 173536-22-6 CAPLUS

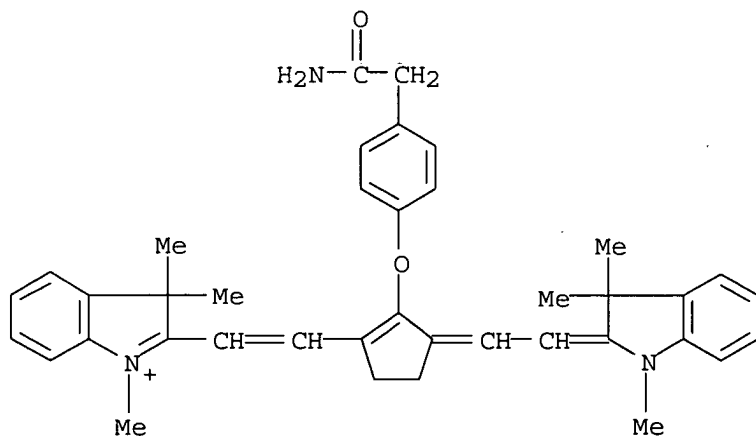
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[3-(dimethylamino)phenoxy]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 173536-23-7 CAPLUS

CN 3H-Indolium, 2-[2-[2-[4-(2-amino-2-oxoethyl)phenoxy]-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 173536-25-9 CAPLUS

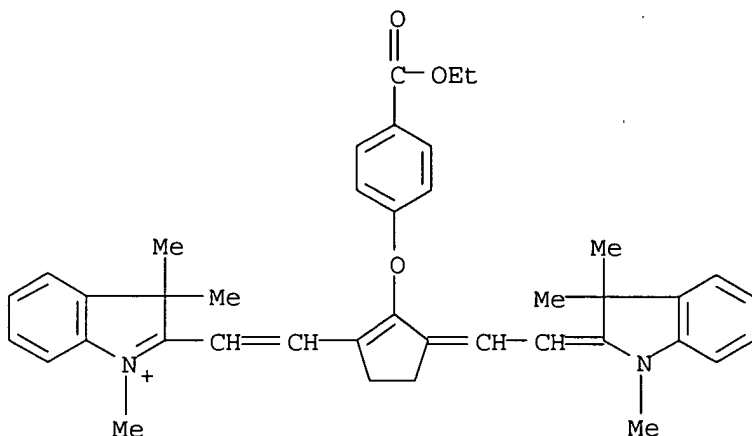
10/665,227R>

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[4-(ethoxycarbonyl)phenoxy]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-24-8

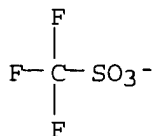
CMF C40 H43 N2 O3



CM 2

CRN 37181-39-8

CMF C F3 O3 S



RN 173536-27-1 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-formylphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

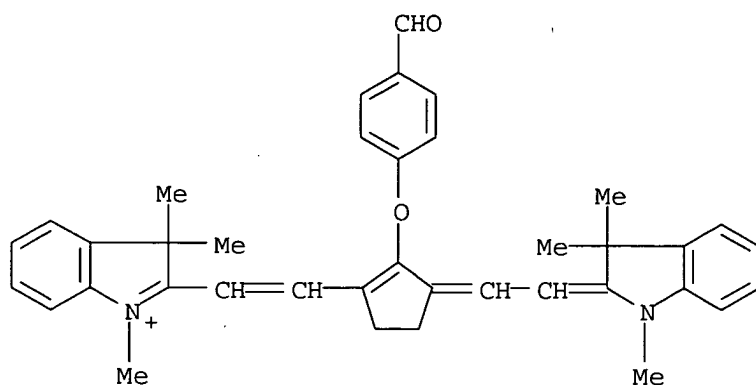
CM 1

CRN 173536-26-0

CMF C38 H39 N2 O2



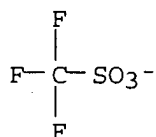
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CM 2

CRN 37181-39-8

CMF C F3 O3 S



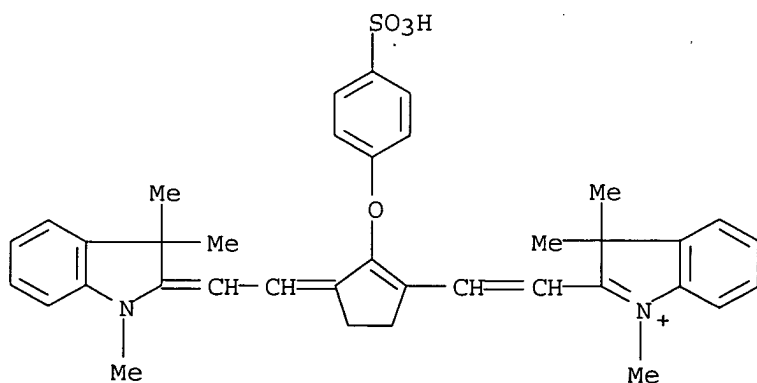
RN 173536-29-3 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylenylidene]-2-(4-sulfophenoxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-28-2

CMF C37 H39 N2 O4 S

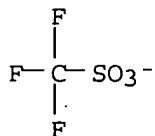


CM 2

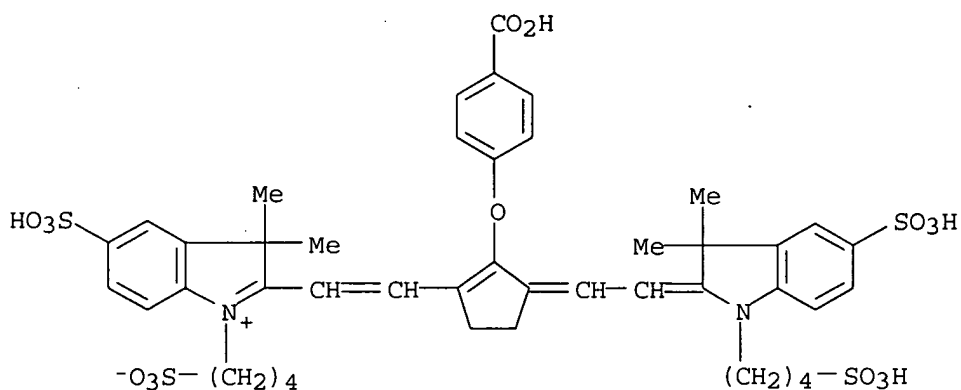
CRN 37181-39-8

CMF C F3 O3 S

10/665,227R>

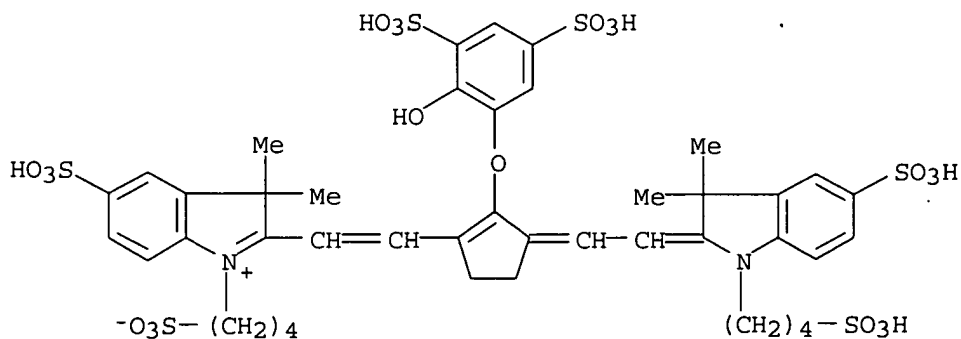


RN 173536-30-6 CAPLUS  
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●4 Na

RN 173536-31-7 CAPLUS  
 CN 3H-Indolium, 2-[2-[3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]ethylidene]-2-(2-hydroxy-3,5-disulfophenoxy)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-, inner salt, pentasodium salt (9CI) (CA INDEX NAME)

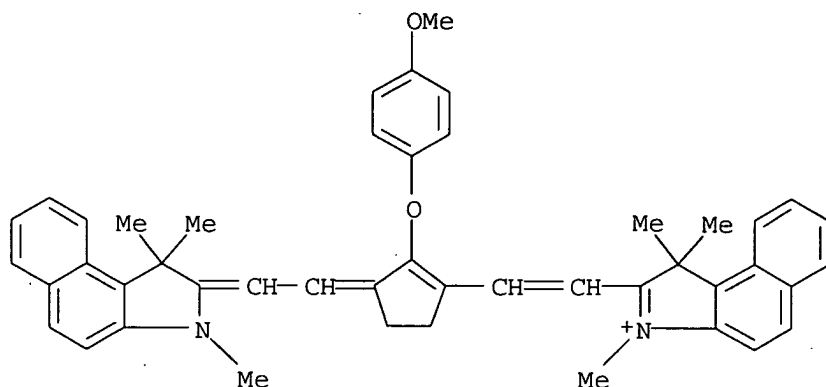


●5 Na

RN 173536-32-8 CAPLUS

10/665,227R>

CN 1H-Benz[e]indolium, 2-[2-[3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, chloride (9CI) (CA INDEX NAME)



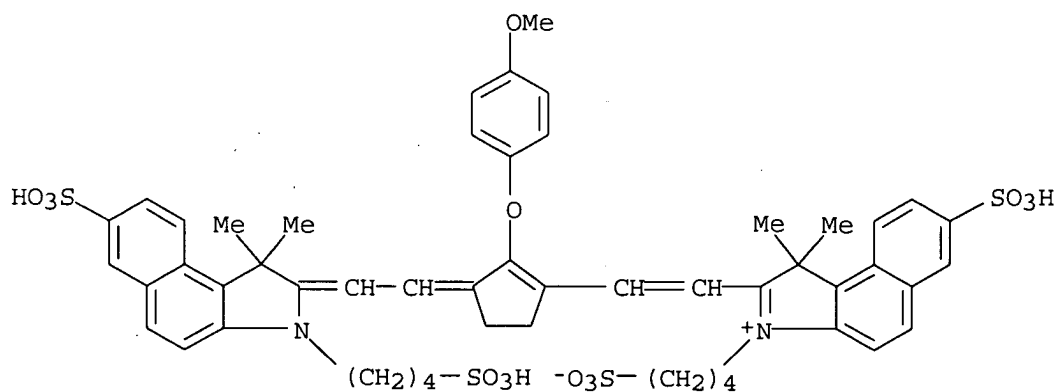
RN 173536-34-0 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[[1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-, inner salt, sodium salt, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 173536-33-9

CMF C52 H56 N2 O14 S4

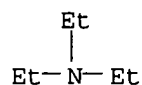


CM 2

CRN 121-44-8

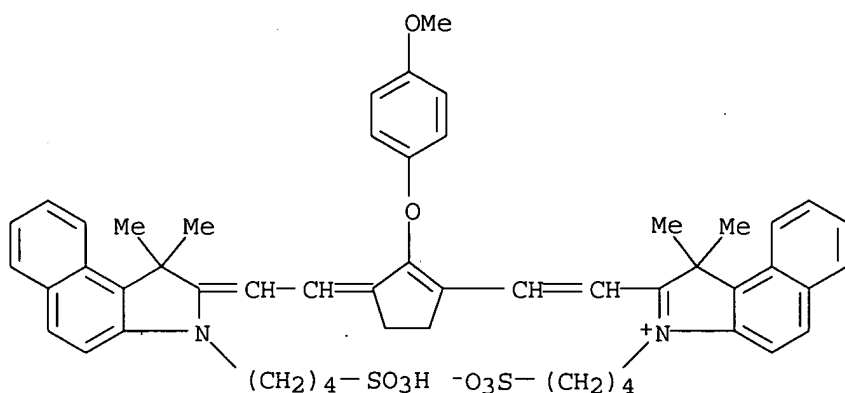
CMF C6 H15 N

10/665,227R>



RN 173536-35-1 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (9CI)  
(CA INDEX NAME)



● Na

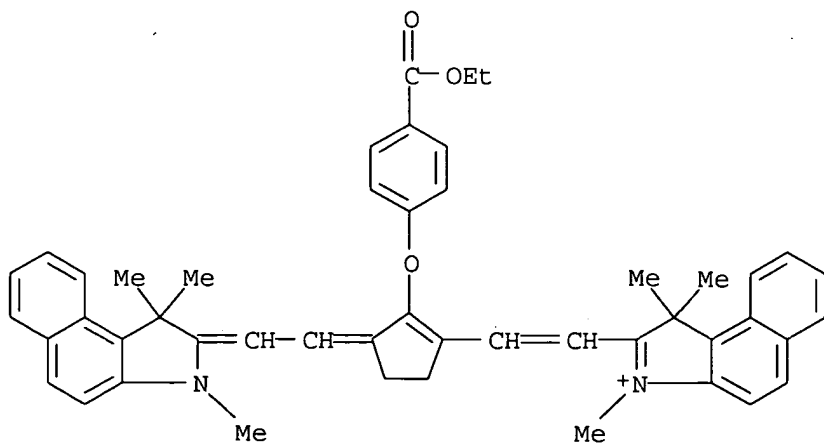
RN 173536-37-3 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[[1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-2-[4-(ethoxycarbonyl)phenoxy]-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 173536-36-2

CMF C48 H47 N2 O3

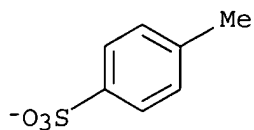


10/665,227R>

CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



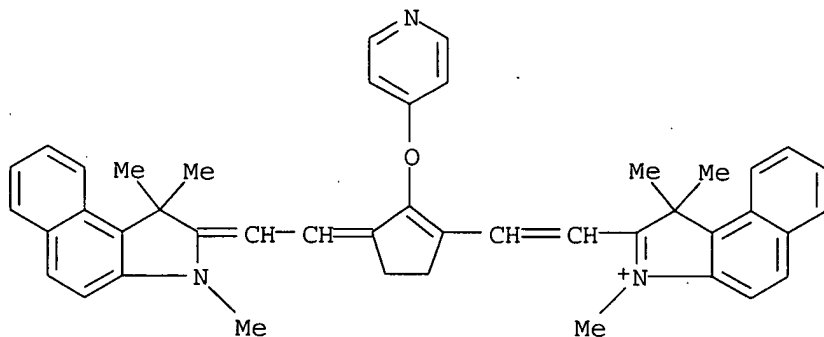
RN 173536-53-3 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-(4-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-52-2

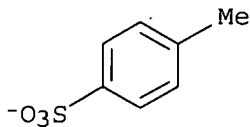
CMF C44 H42 N3 O



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



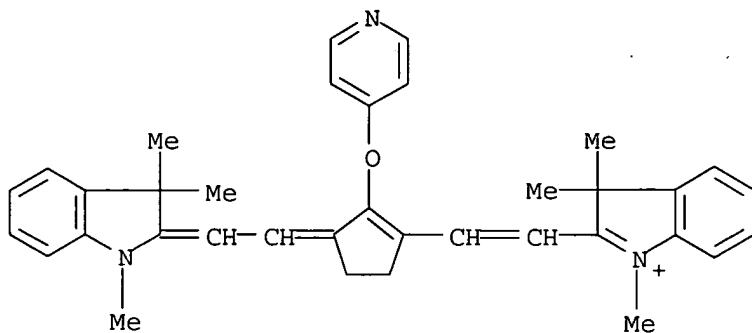
RN 173536-55-5 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

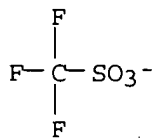
10/665,227R>

CRN 173536-54-4  
CMF C36 H38 N3 O



CM 2

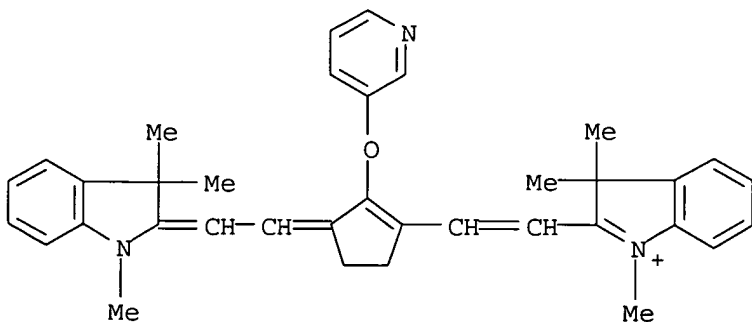
CRN 37181-39-8  
CMF C F3 O3 S



RN 173536-57-7 CAPLUS  
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylenylidene]-2-(3-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

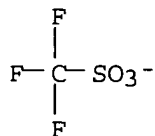
CRN 173536-56-6  
CMF C36 H38 N3 O



CM 2

CRN 37181-39-8  
CMF C F3 O3 S

10/665,227R>



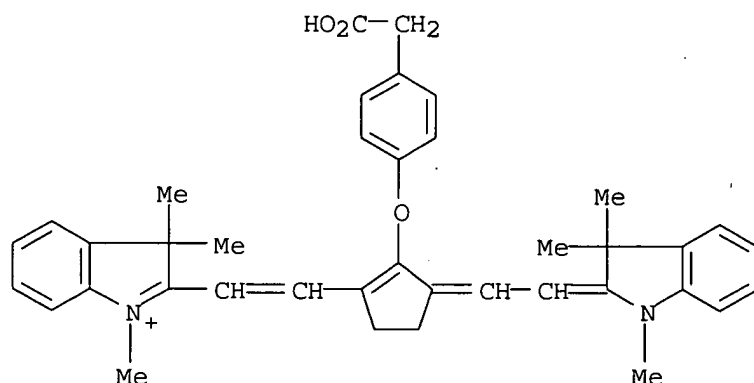
RN 179028-69-4 CAPLUS

CN 3H-Indolium, 2-[2-[2-[4-(carboxymethyl)phenoxy]-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 179028-68-3

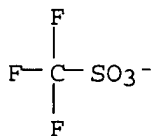
CMF C39 H41 N2 O3



CM 2

CRN 37181-39-8

CMF C F3 O3 S



RN 179028-72-9 CAPLUS

CN 3H-Indolium, 2-[2-[2-(3,5-dicarboxyphenoxy)-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1), disodium salt (9CI) (CA INDEX NAME)

CM 1

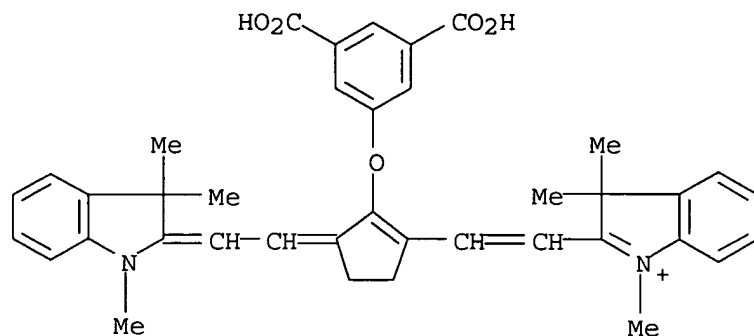
CRN 179028-71-8

CMF C39 H39 N2 O5 . C F3 O3 S

CM 2

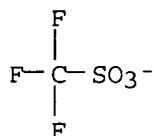
10/665,227R>

CRN 179028-70-7  
CMF C39 H39 N2 O5

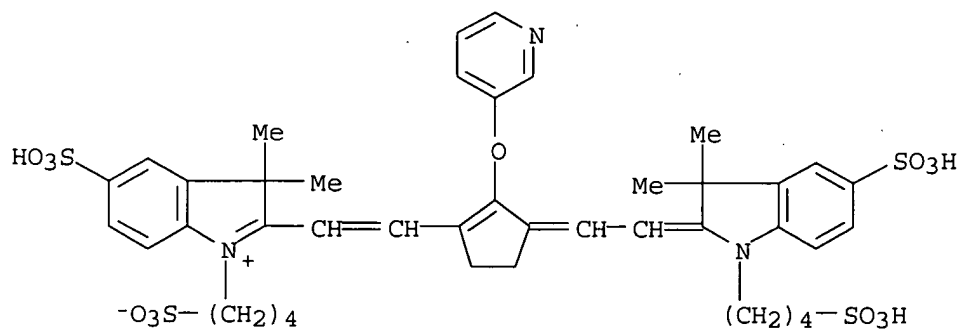


CM 3

CRN 37181-39-8  
CMF C F3 O3 S



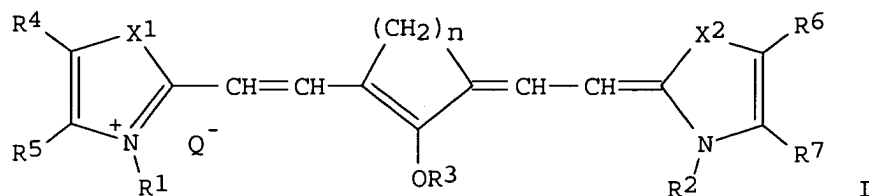
RN 179028-74-1 CAPLUS  
CN 3H-Indolium; 2-[2-[3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfo-4-yl)ethenyl]-2-(3-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfo-4-yl)-, inner salt, tripotassium salt (9CI) (CA INDEX NAME)



● 3 K

GI





AB A novel dye and photog. element comprising the dye are disclosed. The dye is especially useful as an antihalation dye in a photog. element. A particularly preferred embodiment is provided in a photog. element comprising an absorbing amount of the dye having the general formula I wherein X1, X2 independently represents CR8R9, S, Se, NR10, CH=CH, or O; R1 and R2 independently represent alkyl of 1 to 10 carbons or substituted alkyl of 1 to 10 carbons; R3 represents a ring chosen from the set consisting of aromatic rings of 6 or 10 carbons, substituted aromatic rings of

6

or 10 carbons, heterocyclic rings and substituted heterocyclic rings; R4, R5, R6, and R7 independently represent hydrogen, alkyl of 1-10 carbons, substituted alkyl of 1-10 carbons; R8, R9 independently represent alkyl of 1-10 carbons, substituted alkyl of 1-10 carbons, aromatic ring of 6 or 10 carbons, substituted aromatic ring of 6 or 10 carbons; R10 represents alkyl of 1-10 carbons, substituted alkyl of 1-10 carbons, aromatic ring of 6 or 10 carbons, substituted aromatic ring of 6 or 10 carbons; Q represents a counterion; and n is an integer of 2 and 3.

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:115129 CAPLUS

DOCUMENT NUMBER: 124:160219

TITLE: Photographic element containing novel dye for preventing near IR halation

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07287346	A2	19951031	JP 1995-82178	19950407
US 5519145	A	19960521	US 1994-225388	19940408
PRIORITY APPLN. INFO.:			US 1994-225388	A 19940408
			US 1994-195068	B2 19940214

IT 173536-21-5P 173536-22-6P 173536-23-7P

173536-25-9P 173536-27-1P 173536-29-3P

173536-30-6P 173536-31-7P 173536-32-8P

173536-34-0P 173536-35-1P 173536-37-3P

173536-53-3P 173536-55-5P 173536-57-7P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP

(Preparation); USES (Uses)

(prepared as dye for preventing near IR halation of photog. element)

RN 173536-21-5 CAPLUS

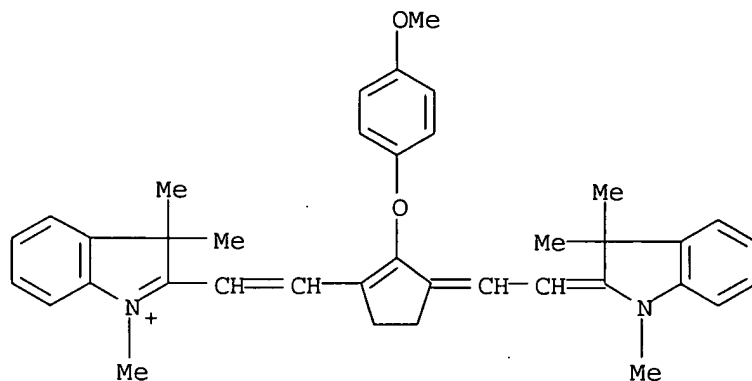
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10/665,227R>

CM 1

CRN 173536-20-4

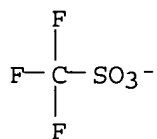
CMF C38 H41 N2 O2



CM 2

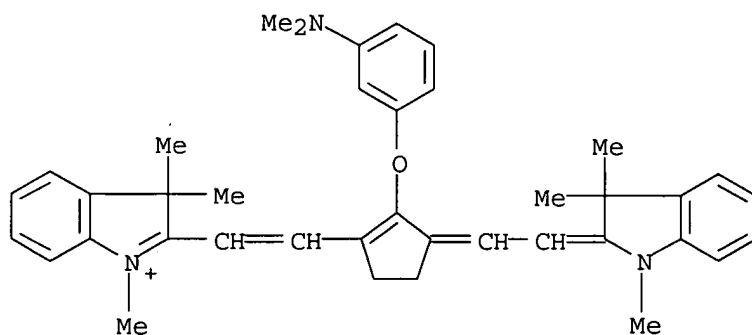
CRN 37181-39-8

CMF C F3 O3 S



RN 173536-22-6 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[3-(dimethylamino)phenoxy]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)



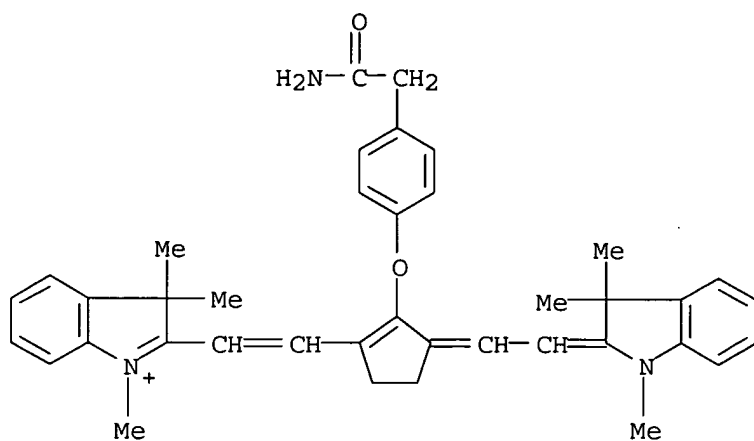
●  $\text{Cl}^-$

RN 173536-23-7 CAPLUS

CN 3H-Indolium, 2-[2-[2-[4-(2-amino-2-oxoethyl)phenoxy]-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,3,3-

10/665,227R>

trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

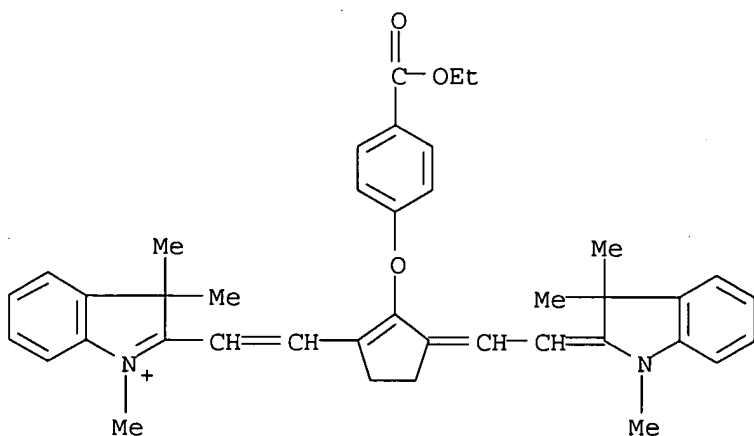
RN 173536-25-9 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[4-(ethoxycarbonyl)phenoxy]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-24-8

CMF C40 H43 N2 O3

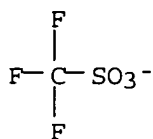


CM 2

CRN 37181-39-8

CMF C F3 O3 S

10/665,227R>



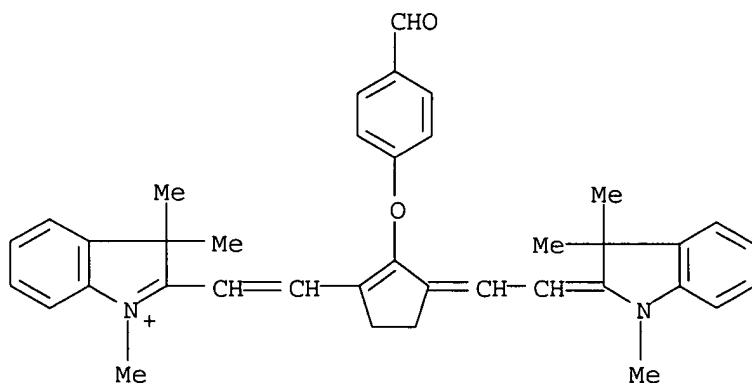
RN 173536-27-1 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-formylphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-26-0

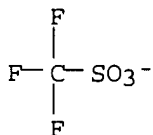
CMF C38 H39 N2 O2



CM 2

CRN 37181-39-8

CMF C F3 O3 S



RN 173536-29-3 CAPLUS

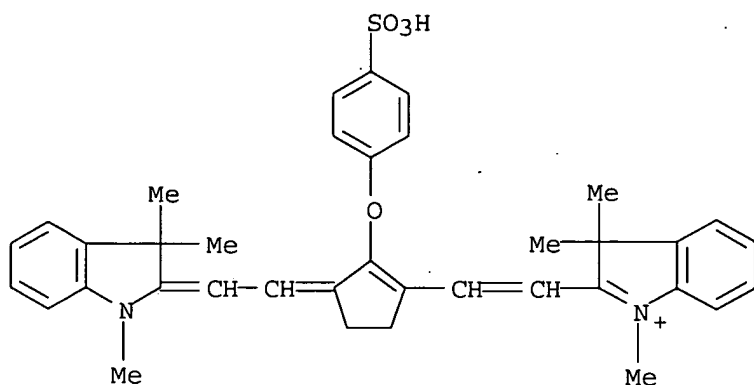
CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-sulfophenoxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-28-2

CMF C37 H39 N2 O4 S

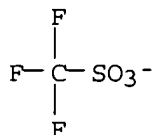
10/665,227R>



CM 2

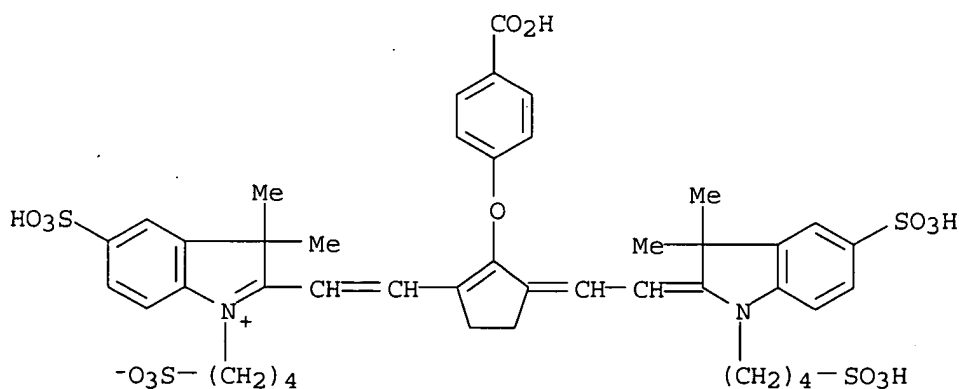
CRN 37181-39-8

CMF C F3 O3 S



RN 173536-30-6 CAPLUS

CN 3H-Indolium, 2-[2-[2-(4-carboxyphenoxy)-3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]ethylidene]-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-, inner salt, tetrasodium salt (9CI) (CA INDEX NAME)

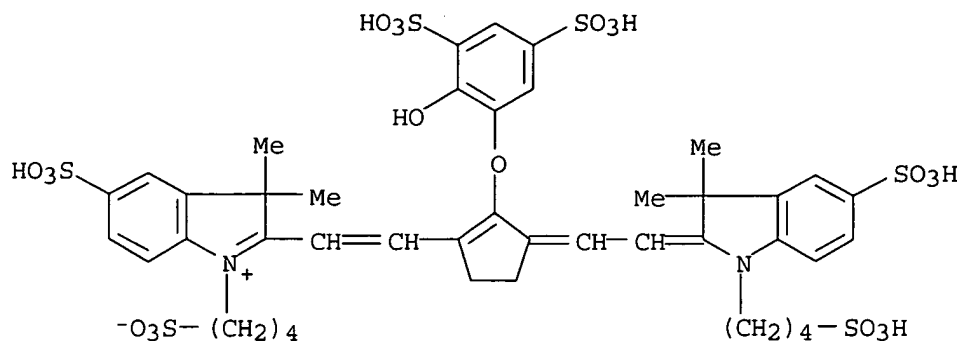


●4 Na

RN 173536-31-7 CAPLUS

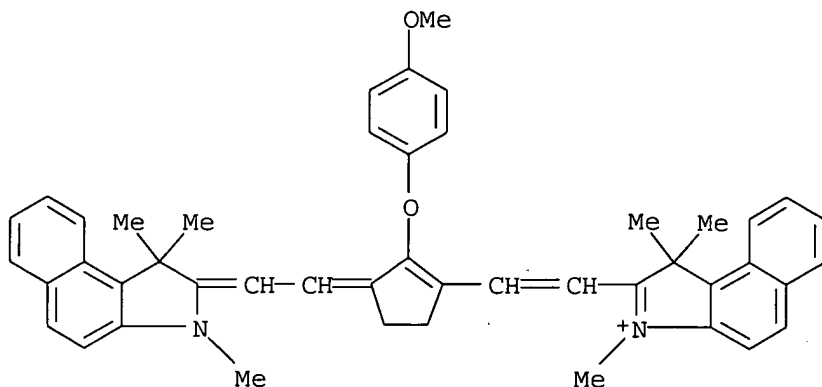
CN 3H-Indolium, 2-[2-[3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]ethylidene]-2-(2-hydroxy-3,5-disulfophenoxy)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-, inner salt, pentasodium salt (9CI) (CA INDEX NAME)

10/665,227R>



● 5 Na

RN 173536-32-8 CAPLUS  
 CN 1H-Benz[e]indolium, 2-[2-[3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

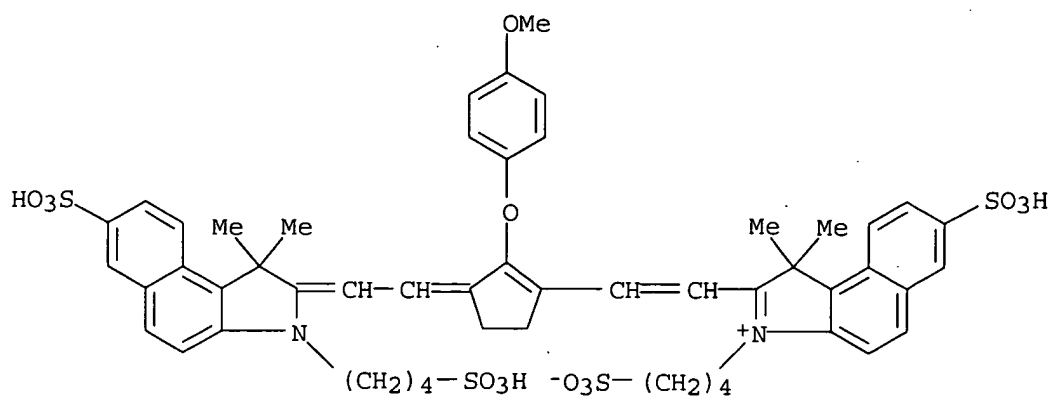
RN 173536-34-0 CAPLUS  
 CN 1H-Benz[e]indolium, 2-[2-[3-[(1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene)ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-, inner salt, sodium salt, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 173536-33-9

CMF C52 H56 N2 O14 S4

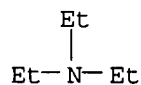
10/665,227R>



CM 2

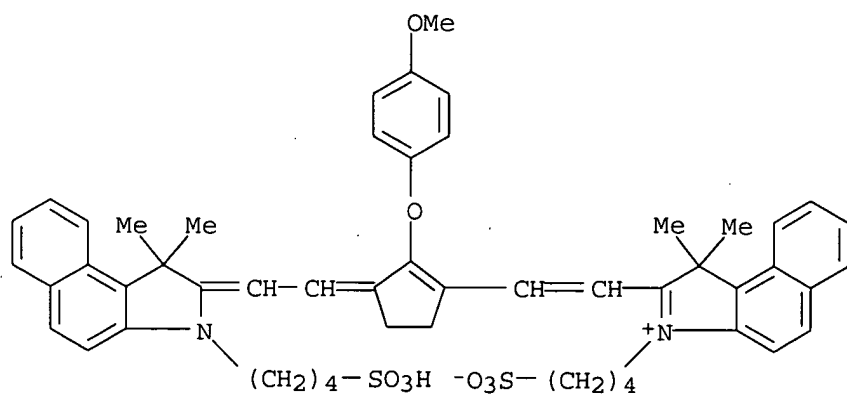
CRN 121-44-8

CMF C6 H15 N



RN 173536-35-1 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[[1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]ethylidene]-2-(4-methoxyphenoxy)-1-cyclopenten-1-yl]ethenyl]-1,1-dimethyl-3-(4-sulfobutyl)-, inner salt, sodium salt (9CI)  
(CA INDEX NAME)



● Na

RN 173536-37-3 CAPLUS

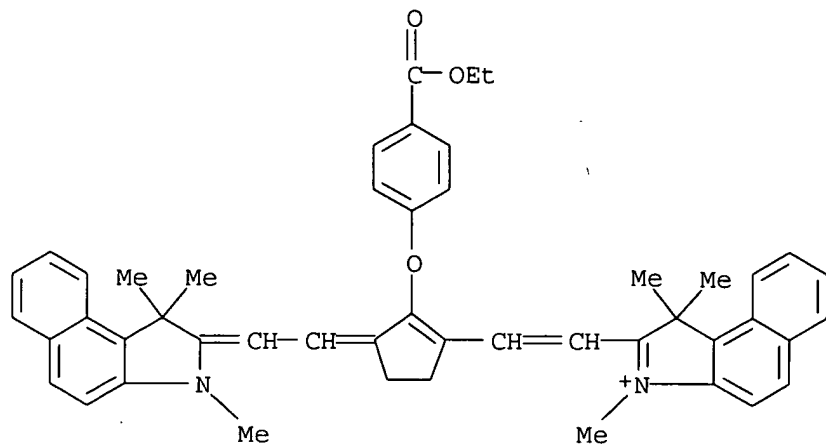
CN 1H-Benz[e]indolium, 2-[2-[3-[[1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene]ethylidene]-2-[4-(ethoxycarbonyl)phenoxy]-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

10/665,227R>

CM 1

CRN 173536-36-2

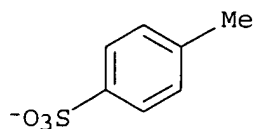
CMF C48 H47 N2 O3



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



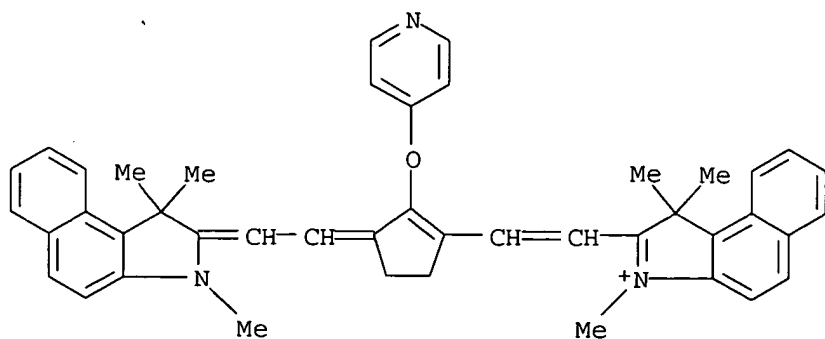
RN 173536-53-3 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-(4-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-52-2

CMF C44 H42 N3 O



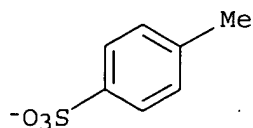


10/665,227R>

CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



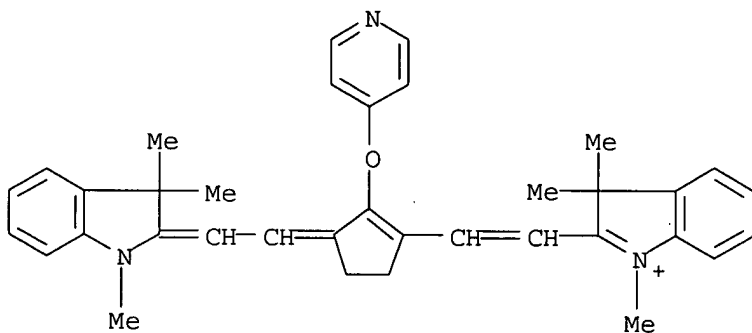
RN 173536-55-5 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(4-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 173536-54-4

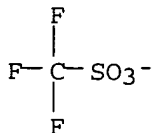
CMF C36 H38 N3 O



CM 2

CRN 37181-39-8

CMF C F3 O3 S



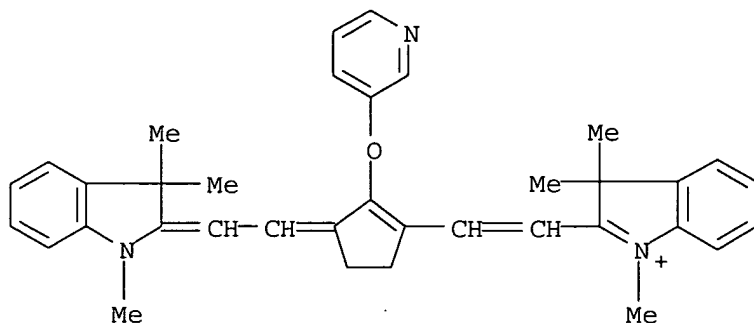
RN 173536-57-7 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(3-pyridinyloxy)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

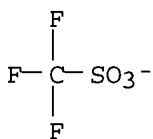
10/665,227R>

CRN 173536-56-6  
CMF C36 H38 N3 O

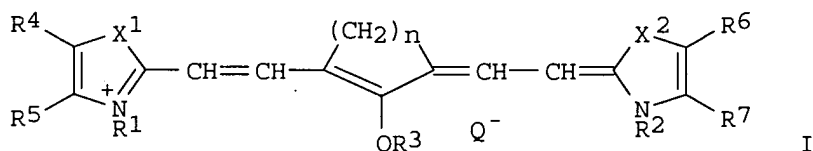


CM 2

CRN 37181-39-8  
CMF C F3 O3 S



GI



AB The title photog. element contains a novel dye I (X1, X2 = CR8R9(R8, R9 = C1-10 alkyl, C6-10 aromatic ring), S, Se, NR10(R10 = 1-10 alkyl, C6-10 aromatic ring), CH:CH, O; R1 and R2 = 1-10 alkyl, C6-10 aromatic ring or heterocyclic ring; Q = counter ion; n = 2, 3).

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1994:633080 CAPLUS  
DOCUMENT NUMBER: 121:233080  
TITLE: Indolenine cyanine dyes  
INVENTOR(S): Harada, Tooru  
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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10/665,227R>

JP 06145539 A2 19940524 JP 1992-295163 19921104  
PRIORITY APPLN. INFO.: JP 1992-295163 19921104

OTHER SOURCE(S): MARPAT 121:233080

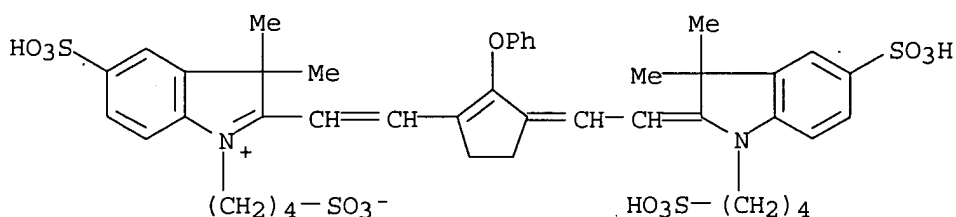
IT 158498-51-2P 158498-60-3P 158498-72-7P

158498-75-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(indolenine cyanine dyes)

RN 158498-51-2 CAPLUS

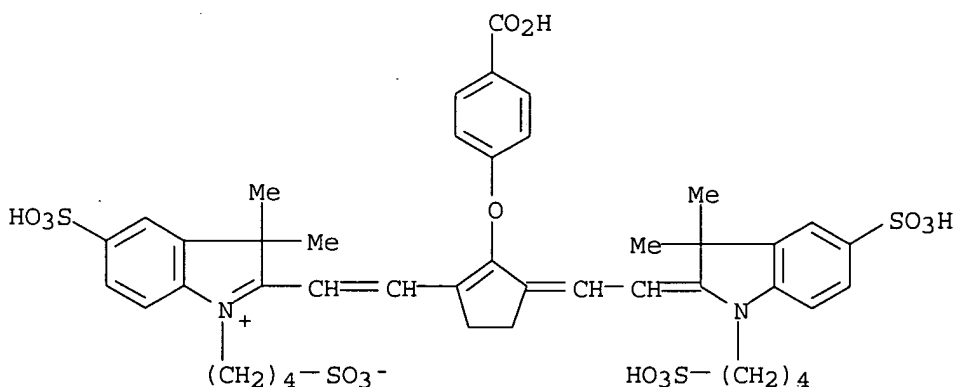
CN 3H-Indolium, 2-[2-[3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfo-1-butyl)-2H-indol-2-ylidene]ethylidene]-2-phenoxy-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfo-1-butyl)-, inner salt, tripotassium salt (9CI)  
(CA INDEX NAME)



● 3 K

RN 158498-60-3 CAPLUS

CN 3H-Indolium, 2-[2-[2-(4-carboxyphenoxy)-3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfo-1-butyl)-2H-indol-2-ylidene]ethylidene]-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfo-1-butyl)-, inner salt, tetrapotassium salt (9CI) (CA INDEX NAME)

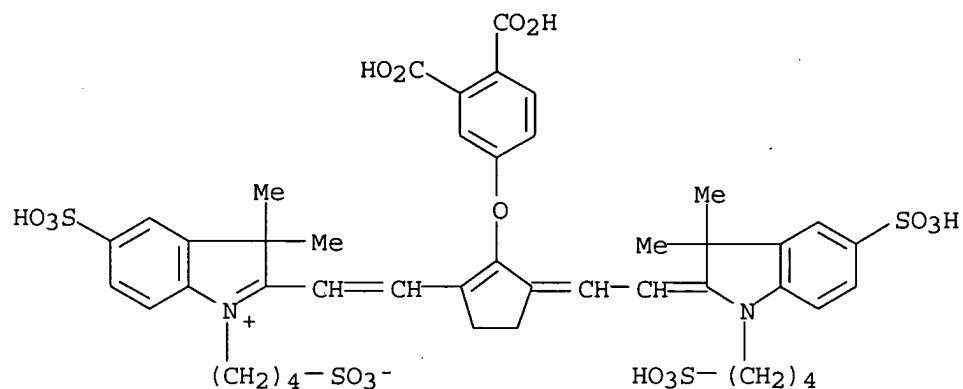


● 4 K

RN 158498-72-7 CAPLUS

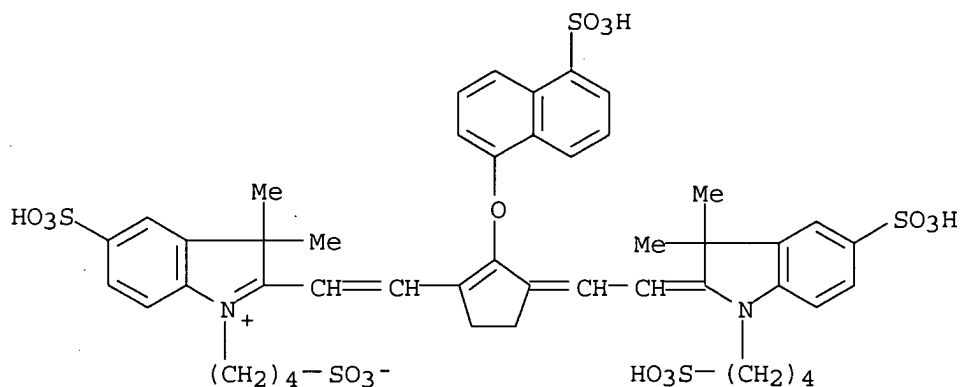
CN 3H-Indolium, 2-[2-[2-(3,4-dicarboxyphenoxy)-3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfo-1-butyl)-2H-indol-2-ylidene]ethylidene]-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfo-1-butyl)-, inner salt, pentapotassium salt (9CI) (CA INDEX NAME)

10/665,227R>



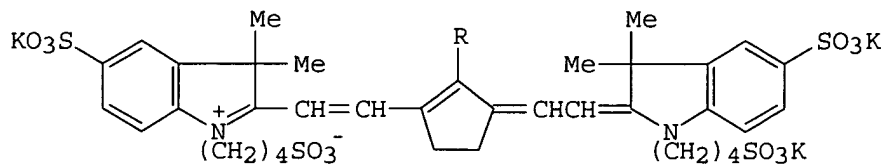
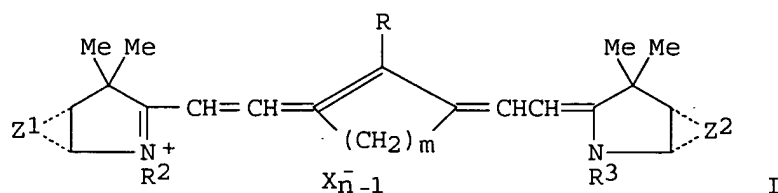
● 5 K

RN 158498-75-0 CAPLUS  
 CN 3H-Indolium, 2-[2-[3-[[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]ethylidene]-2-[(5-sulfo-1-naphthalenyl)oxy]-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-, inner salt, tetrapotassium salt (9CI) (CA INDEX NAME)



● 4 K

GI



II, R=Cl

III, R=SCH<sub>2</sub>CO<sub>2</sub>K

AB The title dyes useful for photog., optical recording, stains, intermediates, etc. have the general formula I (R = SR<sub>1</sub>, OR<sub>1</sub>, NR<sub>4</sub>R<sub>5</sub>, CHR<sub>6</sub>R<sub>7</sub>; R<sub>1</sub> = alkyl, aryl; R<sub>2</sub>, R<sub>3</sub> = alkyl containing acid group; R<sub>4</sub> = alkyl, aryl; R<sub>5</sub> = H, alkyl, aryl; R<sub>6</sub>, R<sub>7</sub> = cyano, sulfo, alkylcarbonyl, arylcarbonyl, carbamoyl, sulfonyl, R<sub>6</sub>R<sub>7</sub> = ring member; Z<sub>1</sub>, Z<sub>2</sub> = acid group-containing benzo or naphtho ring member; X<sup>-</sup> = anion; m = 2, 3; n = 1, 2). II was treated with thioglycolic acid in water in the presence of Et<sub>3</sub>N and recrystd. from MeOH-KOAc to obtain III.

L4 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1994:521602 CAPLUS  
 DOCUMENT NUMBER: 121:121602  
 TITLE: Silver halide photographic material  
 INVENTOR(S): Harada, Toru; Fujiwara, Itsuo  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 34 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 580145	A2	19940126	EP 1993-111683	19930721
EP 580145	A3	19940413		
EP 580145	B1	20000329		
R: DE, FR, GB				
JP 06043583	A2	19940218	JP 1992-215702	19920722
JP 2955803	B2	19991004		
US 5445930	A	19950829	US 1994-329672	19941025
US 5738982	A	19980414	US 1995-468307	19950606
PRIORITY APPLN. INFO.:			JP 1992-215702	A 19920722
			US 1993-93616	B1 19930720
			US 1994-329672	A3 19941025

OTHER SOURCE(S): MARPAT 121:121602

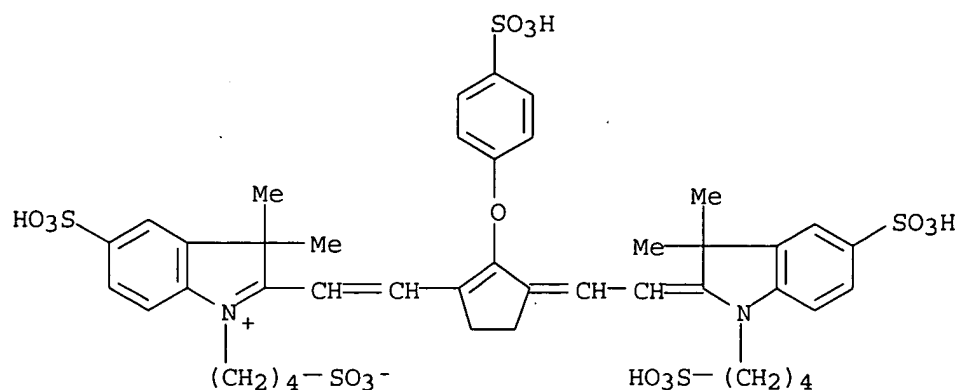
IT 156773-32-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and use of, as IR-absorbing dye for silver halide photog. material)

RN 156773-32-9 CAPLUS

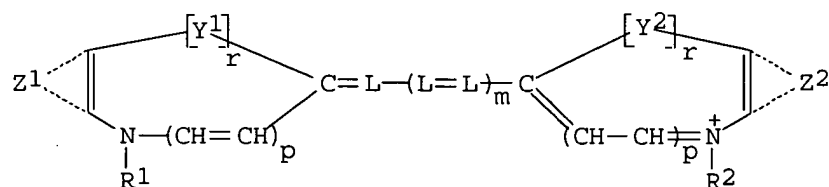
10/665,227R>

CN 3H-Indolium, 2-[2-[3-[1,3-dihydro-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]ethylidene]-2-(4-sulphophenoxy)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-sulfo-1-(4-sulfobutyl)-, inner salt, tetrapotassium salt (9CI) (CA INDEX NAME)



● 4 K

GI



(X)<sub>n-1</sub>

I

AB A novel silver halide photog. material is provided, comprising a hydrophilic colloidal layer containing at least one dye represented by formula I wherein Y1 and Y2 each represents a chalcogen atom, -CH=CH-, -N(R10)-, or -C(R10)(R11)-, in which R10 and R11 each represents an alkyl group; Z1 and Z2 each represents a nonmetallic atom group necessary for forming a benzo condensed or naphtho condensed ring; R1 and R2 each represents an alkyl group; the plurality of L groups may be the same or different and each represents a methine group, with the proviso that at least one of the plurality of L groups represents a methine group substituted by -OR12, -N(R12)(R13), -SR12 or -CH(R14)(R15), in which R12 represents an alkyl or aryl group substituted by an acidic substituent, R13 represents a hydrogen atom or an alkyl or aryl group substituted by an acidic substituent, and R14 and R15 each represents a cyano group, a carboxylic acid group, an acyl group, an alkoxy carbonyl group, an aryloxy carbonyl group, a carbamoyl group, a sulfonyl group or a sulfamoyl group, with the proviso that at least one of R14 and R15 contains an acidic substituent; X represents an anion; p represents an integer 0 or 1; r represents an integer 0 or 1; m represents an integer 2 or 3; and n represents an integer 1 or 2, with the proviso that when the dye forms an intramol. salt, n is 1 and the dye contains at least three acidic substituents.

10/665,227R>

L4 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:621435 CAPLUS  
DOCUMENT NUMBER: 113:221435  
TITLE: Optical recording medium and manufacture thereof  
INVENTOR(S): Umehara, Masaaki  
PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02122984	A2	19900510	JP 1988-276087	19881102
PRIORITY APPLN. INFO.:			JP 1988-276087	19881102

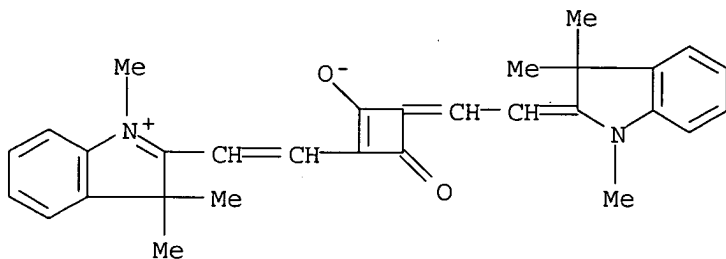
IT 130631-45-7

RL: USES (Uses)

(light reflection layer containing, for optical recording medium)

RN 130631-45-7 CAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-hydroxy-4-oxo-1-cyclobuten-1-yl]ethenyl]-1,3,3-trimethyl-, inner salt (9CI) (CA INDEX NAME)



AB In an optical recording medium comprising a substrate, a subbing layer, an organic dye-based light reflection layer, and a light-absorbing layer, the light-reflecting layer has a spectral reflectivity peak around the record-regenerating wavelength and has a film thickness which maximizes the record-regenerating wavelength light reflectivity.

L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

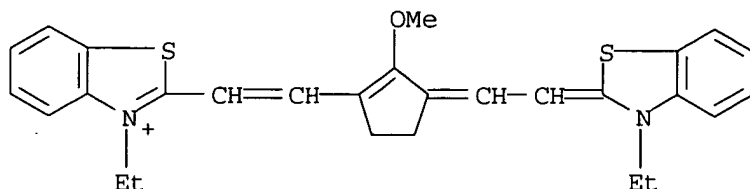
ACCESSION NUMBER: 1988:483107 CAPLUS  
DOCUMENT NUMBER: 109:83107  
TITLE: Polymethine dyes with hydrocarbon-bridge in the chromophore. I. Electronic energy levels of thiatricarbocyanines and their connection with effectiveness of the photographic effect  
AUTHOR(S): Slominskii, Yu. L.; Shapiro, B. I.; Kachkovskii, A. D.; Kurkina, L. G.; Radchenko, I. D.; Chizhova, M. A.; Tolmachev, A. I.  
CORPORATE SOURCE: Inst. Org. Khim., Kiev, USSR  
SOURCE: Journal of Information Recording Materials (1988), 16(1), 23-31  
CODEN: JIRMEA; ISSN: 0863-0453  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
IT 114766-93-7 114766-96-0  
RL: USES (Uses)

10/665,227R>

(electronic energy levels and redox potentials and photog. sensitizing properties of)

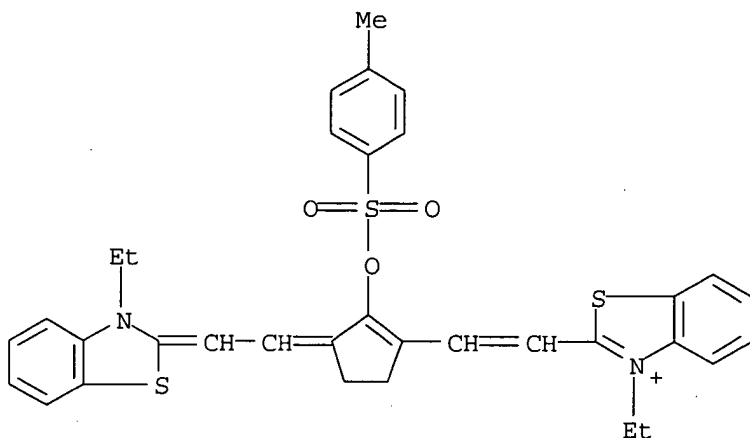
RN 114766-93-7 CAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[3-[(3-ethyl-2(3H)-benzothiazolylidene)ethylidene]-2-methoxy-1-cyclopenten-1-yl]ethenyl]- (9CI) (CA INDEX NAME)



RN 114766-96-0 CAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[3-[(3-ethyl-2(3H)-benzothiazolylidene)ethylidene]-2-[[4-methylphenyl)sulfonyl]oxy]-1-cyclopenten-1-yl]ethenyl]- (9CI) (CA INDEX NAME)



AB A complex investigation by spectral and polarog. measurements as well as quantum-chemical calcs. were carried to estimate the relative and absolute position

of the frontier electron levels of thiatricarbocyanines with polymethylene bridges in the chromophore and their influence upon sensitizing properties in photog. The effects of polymethine groups and substitutions in the meso position on properties of thiatricarbocyanines was analyzed.

Hydrocarbon-bridges have comparatively little effect on calculated energy levels and redox-potentials. Spectral properties are more sensitive.

However, such groups can play the role of an insulator of polymethine chain against O and H2O mols. in the emulsion. With that is connected a considerable increase of the photog. effectiveness of thiatricarbocyanines having a trimethylene bridge.

L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:449658 CAPLUS

DOCUMENT NUMBER: 107:49658

TITLE: Optical information recording media

INVENTOR(S): Oba, Hideaki; Sato, Tsutomu; Umehara, Masaaki; Abe, Michiharu

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.



10/665,227R>

DOCUMENT TYPE: CODEN: JKXXAF  
LANGUAGE: Patent  
FAMILY ACC. NUM. COUNT: Japanese  
PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61248789	A2	19861106	JP 1985-88773	19850426
JP 2521702	B2	19960807		
PRIORITY APPLN. INFO.: IT 109163-50-0			JP 1985-88773	19850426

RL: USES: (Uses)

(optical information recording material containing, with high preservability)

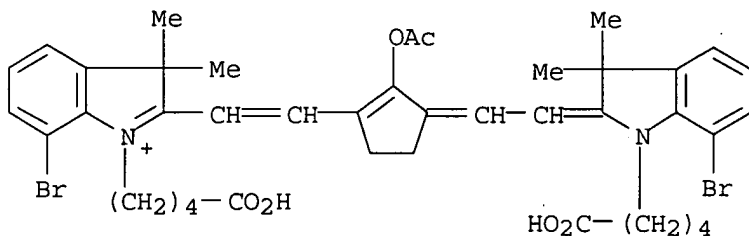
RN 109163-50-0 CAPLUS

CN 3H-Indolium, 2-[2-[2-(acetyloxy)-3-[[7-bromo-1-(4-carboxybutyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclopenten-1-yl]ethenyl]-7-bromo-1-(4-carboxybutyl)-3,3-dimethyl-, methyl sulfate (9CI)  
(CA INDEX NAME)

CM 1

CRN 109163-49-7

CMF C41 H47 Br2 N2 O6



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

GI For diagram(s), see printed CA Issue.

AB The title media contain recording layers containing I [R = halo; a = 1-4; R<sub>1</sub>, R<sub>2</sub> = C<sub>1</sub>-3 alkyl; R<sub>3</sub> = C<sub>1</sub>-10 alkyl (substituted with sulfonyl or carboxyl); X<sup>-</sup> = perhalogenate ion, p-toluenesulfonate ion, alkylsulfate ion; X<sup>-</sup> does not exist when inner salt is formed by elec. charge on R<sub>3</sub>; Z = II; R<sub>4</sub> = H, halo, NH<sub>2</sub>, alkanoyloxy; A = 4-8 membered ring; m, n = 0-3; (m + n) ≤ 3]. The media show high C/N ratio and stability to light and heat and are suitable for semiconductor laser recording. Thus, a recording medium prepared by using a recording layer containing I (R = 7-Br; a = 1; R<sub>1</sub> = R<sub>2</sub> = R<sub>3</sub> = Me; X<sup>-</sup> = BF<sub>4</sub><sup>-</sup>; Z = III) showed high preservability.

L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

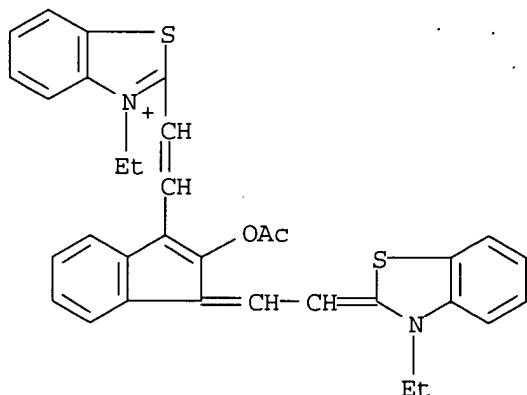
ACCESSION NUMBER: 1987:51677 CAPLUS

DOCUMENT NUMBER: 106:51677

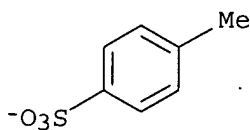
TITLE: Thiatketocyanine dyes with an o-phenylene bridge in the

10/665,227R>

chromophore  
AUTHOR(S): Sosnovskii, G. M.; Lugovskii, A. P.  
CORPORATE SOURCE: Beloruss. Gos. Univ., Minsk, USSR  
SOURCE: Zhurnal Organicheskoi Khimii (1986), 22(9), 1956-8  
CODEN: ZORKAE; ISSN: 0514-7492  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
OTHER SOURCE(S): CASREACT 106:51677  
IT 106290-85-1P 106290-87-3P 106315-12-2P  
106335-20-0P  
RL: MSC (Miscellaneous); SPN (Synthetic preparation); PREP (Preparation)  
(dyes, preparation and hydrolysis of)  
RN 106290-85-1 CAPLUS  
CN Benzothiazolium, 2-[2-[2-(acetyloxy)-1-[(3-ethyl-2(3H)-  
benzothiazolylidene)ethylidene]-1H-inden-3-yl]ethenyl]-3-ethyl-, salt with  
4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 106290-84-0  
CMF C33 H29 N2 O2 S2

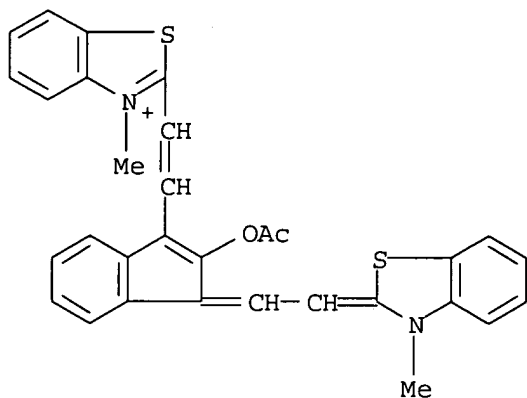


CM 2  
CRN 16722-51-3  
CMF C7 H7 O3 S



RN 106290-87-3 CAPLUS  
CN Benzothiazolium, 2-[2-[2-(acetyloxy)-1-[(3-methyl-2(3H)-  
benzothiazolylidene)ethylidene]-1H-inden-3-yl]ethenyl]-3-methyl-, salt  
with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 106290-86-2  
CMF C31 H25 N2 O2 S2

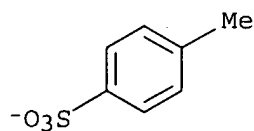
10/665,227R>



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



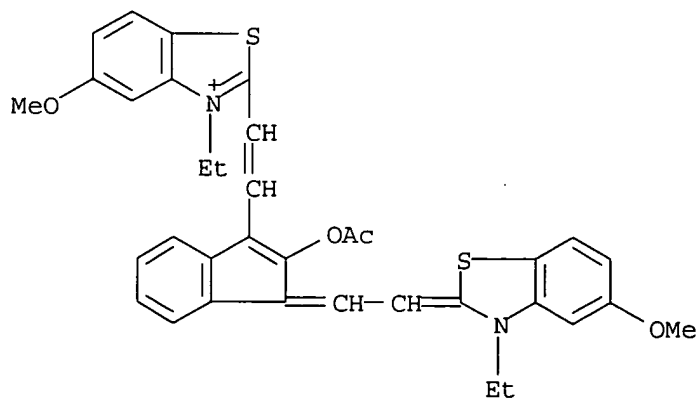
RN 106315-12-2 CAPLUS

CN Benzothiazolium, 2-[2-[2-(acetyloxy)-1-[(3-ethyl-5-methoxy-2(3H)-benzothiazolylidene)ethylidene]-1H-inden-3-yl]ethenyl]-3-ethyl-5-methoxy-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 106315-11-1

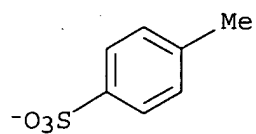
CMF C35 H33 N2 O4 S2



CM 2

10/665,227R>

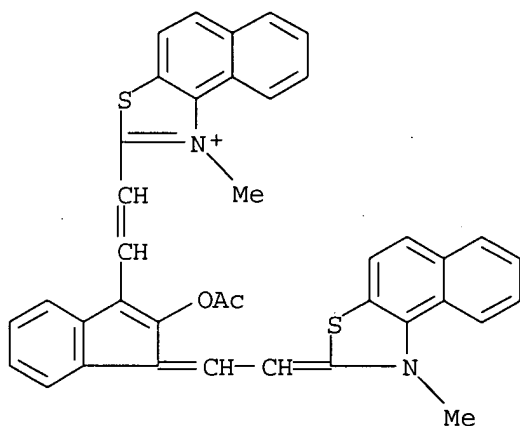
CRN 16722-51-3  
CMF C7 H7 O3 S



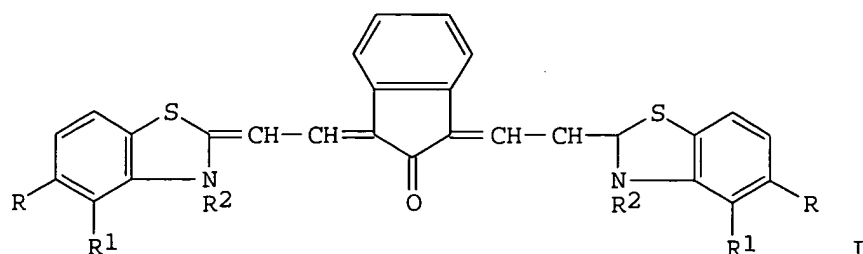
RN 106335-20-0 CAPLUS  
CN Naphtho[1,2-d]thiazolium, 2-[2-[2-(acetyloxy)-1-[(1-methylnaphtho[1,2-d]thiazol-2(1H)-ylidene)ethylidene]-1H-inden-3-yl]ethenyl]-1-methyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 106335-19-7  
CMF C39 H29 N2 O2 S2



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AB The title dyes [I; R = H, OMe; R1 = H; RR1 = (CH:CH)2; R3 = Et, Me] were prepared by condensation of 1,3-bis(dimethylaminomethylene)-2-indanone [3220-79-9] with quaternary salts of 2-methylbenzothiazole derivs. in Ac2O to give meso-acetoxy tricarbo cyanines, which were hydrolyzed to the keto analogs. I absorbed at shorter wavelengths than analogous keto cyanines containing a saturated bridge in the polymethine chain. The hypsochromic shift was 20-65 nm. I had absorption maximum in the region 500-550 nm.

L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:53180 CAPLUS

DOCUMENT NUMBER: 100:53180

TITLE: Synthesis of meso-substituted tricarbo cyanine dyes with an o-phenylene bridge in the chromophore

AUTHOR(S): Sosnovskii, G. M.; Lugovskii, A. P.; Tishchenko, I. G.

CORPORATE SOURCE: Beloruss. Gos. Univ., Minsk, USSR

SOURCE: Zhurnal Organicheskoi Khimii (1983), 19(10), 2143-6

CODEN: ZORKAE; ISSN: 0514-7492

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 100:53180

IT 88505-00-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and spectra of)

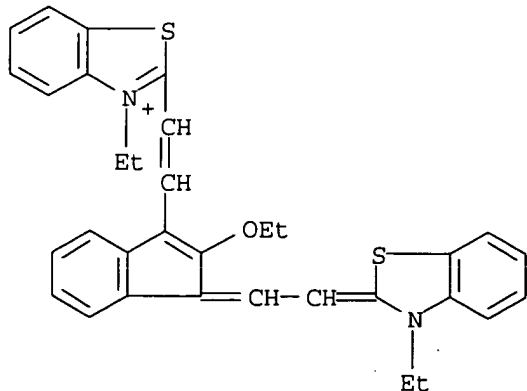
RN 88505-00-4 CAPLUS

CN Benzothiazolium, 2-[2-[2-ethoxy-1-[(3-ethyl-2(3H)-benzothiazolyli-  
dene)ethylidene]-1H-inden-3-yl]ethenyl]-3-ethyl-,  
perchlorate (9CI) (CA INDEX NAME)

CM 1.

CRN 88504-99-8

CMF C33 H31 N2 O S2

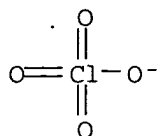


10/665,227R>

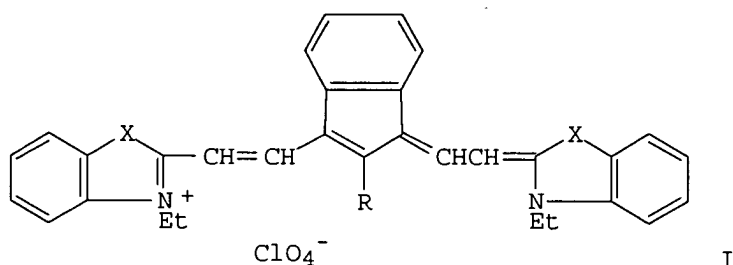
CM 2

CRN 14797-73-0

CMF Cl O4



GI



AB The phenylene-bridged tricarbo-cyanines I (R = OEt, Ph; X = S, CH:CH, CMeEt) and an analogous 4,4'-quinotricarbo-cyanine absorb at lower wavelength than the resp. ethylene-bridged compds. by 70-100 nm. 2-Indanone (II) [615-13-4] was converted to the enol ether with HC(OEt)<sub>3</sub>, bis-aminoformylated with DMF-POCl<sub>3</sub>, and condensed with heterocyclic quaternary compds. to give two I (R = OEt) and the analog. II was treated with PhMgBr, condensed with Me<sub>2</sub>NCH(OMe)<sub>2</sub>, aminoformylated, and condensed with heterocyclic quaternary compds. to give the remaining three I. The I are luminescent with a low quantum yield (10-15%).

L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:35826 CAPLUS

DOCUMENT NUMBER: 100:35826

TITLE: Polymethine dyes with hydrocarbon bridges. Enamine ketones in the chemistry of cyanine dyes

AUTHOR(S): Slominskii, Yu. L.; Radchenko, I. D.; Popov, S. V.; Tolmachev, A. I.

CORPORATE SOURCE: Inst. Org. Khim., Kiev, USSR

SOURCE: Zhurnal Organicheskoi Khimii (1983), 19(10), 2134-42  
CODEN: ZORKAE; ISSN: 0514-7492

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 100:35826

IT 88340-54-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and visible absorption of)

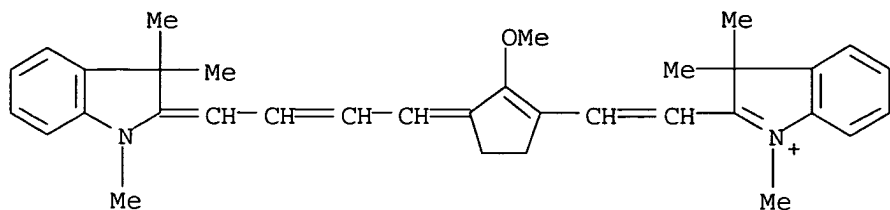
RN 88340-54-9 CAPLUS

CN 3H-Indolium, 2-[2-[3-[4-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-2-butenylidene]-2-methoxy-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

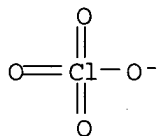
10/665,227R>

CRN 88340-53-8  
CMF C34 H39 N2 O

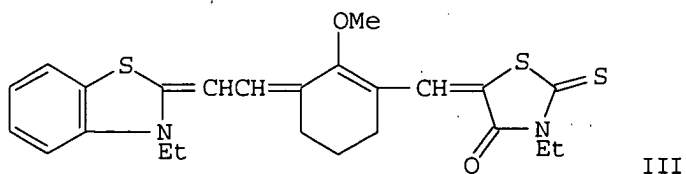
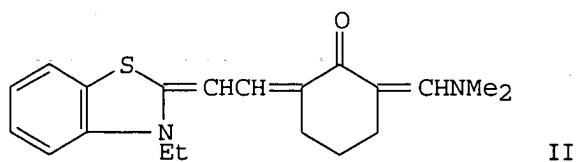
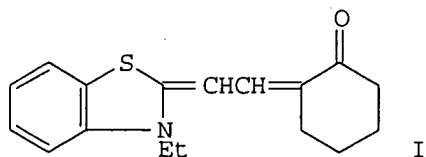


CM 2

CRN 14797-73-0  
CMF Cl O4



GI



AB Cyclopentanone [120-92-3] and cyclohexanone [108-94-1] react with  $\text{Me}_2\text{NCH(OMe)}_2$  [4637-24-5] to give the mono- and bis(enamine) ketones, which are useful in the synthesis of merocyanines and cyanines with bridging groups. For example, 2-(dimethylaminomethylene)cyclohexanone [6135-19-9] reacted with 3-ethyl-2-methylbenzothiazolium p-toluenesulfonate [14933-76-7] in boiling pyridine to give I [88340-49-2] in 87% yield and with 2-(dimethylaminovinyl)-3-

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ethylbenzothiazolium iodide [17579-01-0] in pyridine containing NaOMe to give II [88340-50-5] in 71% yield. O-Methylation of II, reaction with PhNH<sub>2</sub>, and condensation with N-ethylrhodanine [7648-01-3] gave III [88340-51-6] in 26% yield, based on II. <sup>1</sup>H NMR studies showed that I and II, as well as their cyclopentanone analogs, have a pseudo-trans configuration.

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

74.55

236.09

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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